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In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the

application:

1. (Previously Presented) A method of laminating a lithium or lithium alloy sheet into a thin

film, said method comprising:

-passing said sheet of lithium or lithium alloy between the meeting surfaces of a pair

of working rollers to reduce the thickness of said sheet of lithium or lithium alloy to

form a lithium or lithium alloy film of reduced thickness, each of said pair of working

rollers having a convex cylindrical shape;

-measuring the evenness of the thickness of said lithium or lithium alloy film of

reduced thickness with an optical system;

-adjusting the profile defined by said meeting surfaces of said pair of working rollers

in response to measurements of the optical system to control the shape and profile of

said lithium or lithium alloy film of reduced thickness being laminated by applying

forces to the end portions of said working rollers such that each of said pair of

working rollers bends thereby modifying the profile defined by said meeting surfaces

with a deviation of 10 microns or less from a linear profile to produce a lithium or

lithium alloy film of near constant thickness throughout its length and width;

-removing said lithium or lithium alloy film of reduced thickness from between said

pair of working rollers by applying a controlled tension to said lithium or lithium

alloy film.

2. (Canceled)

3. (Canceled)

4. (Previously Presented) A method as defined in claim 1 wherein a pressure sufficient to

reduce the thickness of said lithium or lithium alloy sheet is evenly applied onto said working

rollers by at least one pair of back-up rollers.

5. (Original) A method as defined in claim 4 wherein pressure and forces are generated by

hydraulic piston-cylinders assemblies.

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6. (Original) A method as defined in claim 5 wherein adjustment of pressure and forces is

provided through hydraulic control valves adapted to regulate hydraulic fluid debit.

7. (Original) A method as defined in claim 4 wherein pressure and forces are generated by

electric actuators.

8. (Previously Presented) A method as defined in claim 1 wherein prior to the step of

passing said sheet of lithium or lithium alloy between said pair of working rollers, said

lithium sheet is rapidly wound through a series of tightly packed upper rollers and lower

rollers to eliminate any lateral displacement of said lithium sheet thereby ensuring said

lithium sheet is fed straight into a central portion of said working rollers without any lateral

weaving motion.

9. (Original) A method as defined in claim 1 wherein said working rollers are made of

stainless steel.

10. (Original) A method as defined in claim 9 wherein said working rollers are coated with

chrome.

11. (Previously Presented) A method as defined in claim 1 wherein said working rollers are

made of at least one of plastic and acetal.

12. (Original) A method as defined in claim 1 wherein a lamination lubricant is applied to

the sheet of lithium or lithium alloy.

13. (Currently Amended) An apparatus for laminating a lithium or lithium alloy sheet into a

thin film, said apparatus comprising:

a lithium or lithium alloy sheet feed roller; a lamination lubricant dispensing unit; a

pair of working rollers mounted onto supporting members, each of said pair of working

rollers having a convex cylindrical shape defining a lamination surface adapted to reduce the

thickness of said sheet of lithium or lithium alloy to form a lithium or lithium alloy film of

reduced thickness;

an optical measurement system for measuring the evenness of the thickness of said

lithium or lithium alloy film of reduced thickness; adjustment means said supporting

members being linked to the optical measurement system for adjusting the profile of said

lamination surface defined by said pair of working rollers in response to measurement of the

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optical measurement system by applying forces to said working rollers such that each of said

working rollers bends thereby to control the shape and profile of said lithium or lithium alloy

film of reduced thickness being laminated; and

a winding roll for winding said lithium or lithium alloy film of reduced thickness, said

winding roll connected to a driving means for winding said film under a controlled tension.

14. (Canceled)

15. (Currently Amended) An apparatus as defined in claim [[14]] 13 further comprising at

least one pair of back-up rollers, each adjacent and in contact with one of said pair of working

rollers and adapted to apply pressure onto the adjacent working roller.

16. (Currently Amended) An apparatus as defined in claim [[14]] 13 further comprising

hydraulic piston-cylinders to generate a necessary force to bend said working rollers.

17. (Currently Amended) An apparatus as defined in claim [[14]] 13 wherein hydraulic

piston-cylinders are mounted onto support frames to which are mounted said back-up rollers.

18. (Canceled)

19. (Original) An apparatus as defined in claim 16 wherein adjustment of pressure and forces

is provided through hydraulic control valves adapted to regulate hydraulic fluid debit.

20. (Previously Presented) An apparatus as defined in claim 13 further comprising a

straightener having a series of tightly packed upper rollers and lower rollers adapted to

eliminate any lateral displacement of said lithium or lithium alloy sheet thereby ensuring said

lithium or lithium alloy sheet is fed straight into said lamination surface without any lateral

weaving motion.

21. (Original) An apparatus as defined in claim 13 further comprising a thin film of

insulating material which is winded around the winding roller to separate layers of lithium or

lithium alloy film such that they will not adhere to each other.

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